

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512



June 25, 2001

Mr. Stuart Husband  
Safety, Health & Environmental Specialist  
Sacramento Cogeneration Authority  
P.O. Box 15830  
Sacramento, CA 95852-1830

SUBJECT: Approval of Petition to Modify the Language in Air Quality Conditions 10, 11, 12 and 39 (AQ-10, -11, -12, -39) and New Condition AQ-44 Procter and Gamble Cogeneration Project (93-AFC-2C)

Dear Mr. Husband:

California Energy Commission (Energy Commission) staff reviewed your petition dated April 24, 2001, which requested approval for the following modifications in order to increase the generating capacity of the Procter and Gamble facility by 8 to 10 megawatts:

- Increase the hourly mass emission limits for oxides of nitrogen (NO<sub>x</sub>) and reactive organic compounds (ROC) in AQ-10 for the combined cycle and simple cycle gas turbine units.
- Increase daily NO<sub>x</sub> and ROC mass emission limits in AQ-11 for the simple cycle gas turbine unit.
- Increase quarterly emission limits in AQ-12; and
- Modify the language in AQ-39 to provide a 60-day turnaround time for submitting annual air emission source test results.

As directed by Governor's Executive Order D-25-01, concerning post-certification amendments, we have expedited review of this proposed project modification because statutes and implementing regulations that normally apply to review and approval of this amendment have been suspended.

The Sacramento Metropolitan Air Quality Management District (District) has completed their review and revised the Authority to Construct to reflect the requested modifications. Energy Commission staff has concluded that this modification, with the mitigation required by the District, has no potential for adverse environmental or public health and safety impacts. In addition to the language modification requested in your petition, Energy Commission staff has included a new condition, AQ-44, describing the mitigation measures required by the District and agreed to by staff. Therefore, you are authorized to proceed with the project modifications as requested. A copy of this letter will be posted on the Energy's Commission website at [www.energy.ca.gov](http://www.energy.ca.gov), and we will

file a California Environmental Quality Act Notice of Exemption with the State Clearinghouse.

Following are the modified conditions of certification AQ-10, -11, -12, and new condition AQ-44. Please note that new language is indicated by underline and bold, while strikeout indicates deleted language.

**AQ-10** Emission at the SCA Cogeneration facility on a pound per hour basis, shall not exceed the following limits averaged over a three-hour period, not including start-ups as defined in conditions 22 and 24.

Pollutant	Units	CTG + Duct Burner (each)	Simple Cycle CTG	Auxiliary Boiler	Cooling Tower
NOx	lb/hr	<del>9.29</del> <b>9.72</b>	<del>7.70</del> <b>8.22</b>	1.15	
CO	lb/hr	4.2	3.3	7.12	
ROC	lb/hr	1.8	<del>1.10</del> <b>1.18</b>	0.41	
SOx	lb/hr	0.32	0.27	0.08	
PM10	lb/hr	3.3	2.5	0.54	0.29

The CO emissions from the combustion turbines were taken at a different temperature scenario which represented a worst-case continuous operation condition.

The District in agreement with the applicant may choose to decrease the above hourly emission limits to correspond to the source test results pursuant to condition 38.

Verification: The project owner/operator shall maintain appropriate emission data records as required by Condition AQ-8 and submit source test reports required under Conditions AQ-55 and AQ-38.

**AQ-11** Emission at the SCA Cogeneration facility, from the following equipment listed below, on a pound per calendar basis, shall not exceed the following limits.

Pollutant	Unit	Combined Cycle CTG with Supp. Fuel	Simple Cycle CTG	Cooling Tower	Auxiliary Boiler	Total Emissions
Nox	lb/day	233	<del>491.5</del> <b>203.8</b>		27.6	<del>683.1</del> <b>697.3</b>
CO	lb/day	113.4	85.1		170.8	482.7
ROC	lb/day	43.2	<del>26.4</del> <b>28.3</b>		9.8	<del>422.7</del> <b>124.5</b>
Sox	lb/day	7.7	6.5		1.8	23.7
PM10	lb/day	79.2	60	7	13.1	238.5

The District in agreement with the applicant may choose to decrease the above daily emission limits to correspond to the source test results pursuant to condition 38.

Verification: The project owner/operator shall maintain appropriate emission data

records as required by Condition AQ-8.

**AQ-12** Emissions at the entire SCA Cogeneration facility shall not exceed the following limits on a quarterly basis.

Quarter	Unit	NOx	CO	ROC	SOx	PM10
Qtr 1	lb/qtr	<del>45,586</del> <b>49,051</b>	<del>28,658</del> <b>29,758</b>	<del>7,894</del> <b>8,287</b>	<del>1,632</del> <b>1,722</b>	<del>16,387</del> <b>17,220</b>
Qtr 2	lb/qtr	<del>47,097</del> <b>49,590</b>	<del>28,970</del> <b>30,082</b>	<del>7,982</del> <b>8,380</b>	<del>1,650</del> <b>1,741</b>	<del>16,569</del> <b>17,411</b>
Qtr 3	lb/qtr	<del>47,607</del> <b>50,128</b>	<del>29,285</del> <b>30,407</b>	<del>8,070</del> <b>8,472</b>	<del>1,668</del> <b>1,760</b>	<del>16,754</del> <b>17,603</b>
Qtr 4	lb/qtr	<del>47,607</del> <b>50,128</b>	<del>29,282</del> <b>30,407</b>	<del>8,070</del> <b>8,472</b>	<del>1,668</del> <b>1,760</b>	<del>16,754</del> <b>17,603</b>

The District in agreement with the applicant may choose to decrease the above daily emission limits to correspond to the source test results pursuant to condition 38.

Verification: The project owner/operator shall maintain appropriate emission data records as required by Condition AQ-8.

**AQ-39** A NOx, ROC, CO, PM10, and ammonia source test of the auxiliary boiler, each of the combined cycle combustion turbines with duct fired HRSG, and the simple cycle combustion turbine shall be performed annually during the first calendar quarter.

- a. The project owner/operator shall submit a test plan to the Air Pollution Control Officer for approval at least 30 days before the source test is to be performed.
- b. During the test(s), all of the turbines and HRSGs are to be operated at their maximum total firing capacities. The auxiliary boiler must also be tested at its maximum firing capacity.
- c. The turbines are to also be tested at 50% load for CO and ROC.
- d. The source test results shall be submitted to the Air Pollution Control Officer within ~~30~~ **60** days from the completion of the source test(s).
- e. The Air Pollution Control Officer may waive the annual PM10 source test requirement if, in the Air Pollution Control Officer's sole judgement, prior test results indicate an adequate compliance margin has been maintained.

Verification: The project owner/operator shall submit a test plan to the Air Pollution Control Officer for approval at least 30 days before the source tests are to be performed. The source test results shall be submitted to the Air Pollution Control Officer and the CEC CPM within ~~30~~ **60** days from the completion of the source tests.

**AQ-44 DELETED The proposed ERC's to mitigate the increase in NOx, ROC, and PM10 emissions specifically from this modification (A/C 15821-15823) and their amounts are presented below:**

**NOx**

	<u>Face Value Of Certificates Surrendered</u>						<u>Value Applied To The Emission Liability</u>			
	<u>Qtr1</u>	<u>Qtr2</u>	<u>Qtr3</u>	<u>Qtr4</u>			<u>Qtr1</u>	<u>Qtr2</u>	<u>Qtr3</u>	<u>Qtr4</u>
<b><u>Campbell Soup</u></b>	<u>2,958</u>	<u>2,992</u>	<u>3,025</u>	<u>3,025</u>	<u>1</u>	<u>1.2</u>	<u>2,465</u>	<u>2,493</u>	<u>2,521</u>	<u>2,521</u>
					<b><u>Nox Liability of this Modification</u></b>		<u>2,465</u>	<u>2,493</u>	<u>2,521</u>	<u>2,521</u>

**ROC**

	<u>Face Value Of Certificates Surrendered</u>						<u>Value Applied To The Emission Liability</u>			
	<u>Qtr1</u>	<u>Qtr2</u>	<u>Qtr3</u>	<u>Qtr4</u>			<u>Qtr1</u>	<u>Qtr2</u>	<u>Qtr3</u>	<u>Qtr4</u>
<b><u>Formica</u></b>	<u>1,181</u>	<u>1,320</u>	<u>1,458</u>	<u>1,458</u>	<u>1</u>	<u>1.5</u>	<u>787</u>	<u>880</u>	<u>972</u>	<u>972</u>
					<b><u>ROC Liability of this Modification</u></b>		<u>787</u>	<u>880</u>	<u>972</u>	<u>972</u>

**PM10**

	<u>Face Value Of Certificates Surrendered</u>						<u>Value Applied To The Emission Liability</u>			
	<u>Qtr1</u>	<u>Qtr2</u>	<u>Qtr3</u>	<u>Qtr4</u>			<u>Qtr1</u>	<u>Qtr2</u>	<u>Qtr3</u>	<u>Qtr4</u>
<b><u>SierraPine</u></b>	<u>1,250</u>	<u>1,263</u>	<u>1,278</u>	<u>1,278</u>	<u>1</u>	<u>1.5</u>	<u>833</u>	<u>842</u>	<u>852</u>	<u>852</u>
					<b><u>PM10 Liability of this Modification</u></b>		<u>833</u>	<u>842</u>	<u>852</u>	<u>852</u>

**Offsets in the amounts stated above must be surrendered to the District before SCA may operate to the increased levels proposed in this modification.**

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**Verification: The project owner/operator shall surrender the offsets in the amounts stated above to the District before SCA may operate to the increased levels proposed in this modification. Copies of the ERCs surrendered shall be provided to CPM no later than 30 days after SCA starts to operate at the increased levels.**

If you have any questions, please contact Jeri Zene Scott, Compliance Project Manager, at (916) 654-4228, or by e-mail at [jscott@energy.state.ca.us](mailto:jscott@energy.state.ca.us).

Sincerely,

ROBERT L. THERKELSEN, Deputy Director  
Systems Assessment & Facilities Siting

cc: Jeri Zene Scott, Energy Commission  
Matt Layton, Energy Commission